

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended) A digital signal processing system including a first digital signal processing apparatus ~~connected via~~, a predetermined digital bus ~~to~~, and a second digital signal processing apparatus whose ~~data transmission rate can be controlled by other apparatuses on the digital bus~~, wherein the predetermined digital bus supports real-time data transmission for transmitting audiovisual data and asynchronous data transmission for transmitting control data, and a plurality of electronic apparatuses including the first digital signal processing apparatus and the second digital signal processing apparatus are connected to the predetermined digital bus, the first digital signal processing apparatus comprising:

first command generating means for generating a first command for making an inquiry to the second digital signal processing apparatus connected via the predetermined digital bus about a capability of rate control functions of the second digital signal processing apparatus;

second command generating means for generating a second command for rate control of the real-time data transmission of the second digital signal processing apparatus;

first command transmitting means for transmitting the first command to the second digital signal processing

apparatus via the predetermined digital bus; and

first response receiving means for receiving a first response to the transmitted first command, wherein

the predetermined digital bus supports real-time data transmission for transmitting audio/visual data and asynchronous data transmission for transmitting control data  
the first response is transmitted from the second digital signal processing apparatus via the predetermined digital bus;

second command transmitting means for transmitting the second command to the second digital signal processing apparatus via the predetermined digital bus;

real-time data receiving means for receiving the real-time audiovisual data transmitted from the second digital signal processing apparatus; and

the second digital signal processing apparatus transmits the data via the predetermined digital bus comprising:

first command receiving means for receiving the first command for inquiry about the capability of rate control functions of the second digital signal processing apparatus transmitted from the first digital signal processing apparatus via the predetermined digital bus;

second command receiving means for receiving the second command for rate control of the real-time data transmission of the second digital signal processing apparatus transmitted from the first digital signal processing apparatus via the predetermined digital bus;

first command examining means for examining, in response to the first command, the capability of rate control functions

of the second digital signal processing apparatus;

first response sending means for sending a result of the examination of the first command examining means to the first digital signal processing apparatus in response to the first command;

second command examining means for examining, in response to the second command, the rate control of the real-time data transmission of the second digital signal processing apparatus; and

real-time data transmitting means for transmitting the real-time audiovisual data at the controlled rate in response to a result of the examination of the second command examining means.

Claim 2 (Previously Presented) The digital signal processing system as set forth in Claim 1, wherein the rate control functions of the second digital signal processing apparatus include a synchronous control, a base data transmission rate control, and a variable rate control for fine adjustment of a base data transmission rate.

Claims 3-20 (Cancelled)

Claim 21 (New) A digital signal processing method for use in a system including a first digital signal processing apparatus using a first digital signal processing method, a predetermined digital bus, and a second digital signal processing apparatus using a second digital signal processing

method, wherein the predetermined digital bus supports real-time data transmission for transmitting audiovisual data and asynchronous data transmission for transmitting control data, and a plurality of electronic apparatuses including the first digital signal processing apparatus and the second digital signal processing apparatus are connected to the predetermined digital bus, the first digital signal processing method comprising the steps of:

generating a first command for making an inquiry to the second digital signal processing apparatus connected via the predetermined digital bus about a capability of rate control functions of the second digital signal processing apparatus;

generating a second command for rate control of the real-time data transmission of the second digital signal processing apparatus;

transmitting the first command to the second digital signal processing apparatus via the predetermined digital bus;

receiving a first response to the first command, the first response is transmitted from the second digital signal processing apparatus via the predetermined digital bus;

transmitting the second command to the second digital signal processing apparatus via the predetermined digital bus;

receiving the real-time audiovisual data transmitted from the second digital signal processing apparatus; and

the second digital signal processing method comprising the steps of:

receiving the first command for inquiry about the capability of rate control functions of the second digital

signal processing apparatus transmitted from the first digital signal processing apparatus via the predetermined digital bus;

receiving the second command for rate control of the real-time data transmission of the second digital signal processing apparatus transmitted from the first digital signal processing apparatus via the predetermined digital bus;

examining, in response to the first command, the capability of rate control functions of the second digital signal processing apparatus;

sending a result of the examination to the first digital signal processing apparatus in response to the first command;

examining, in response to the second command, the rate control of the real-time data transmission of the second digital signal processing apparatus; and

transmitting the real-time audiovisual data at the controlled rate in response to a result of the examination.

Claim 22 (New) The digital signal processing method as set forth in Claim 21, wherein the rate control functions of the second digital signal processing apparatus include a synchronous control, a base data transmission rate control, and a variable rate control for fine adjustment of a base data transmission rate.